

Date: Wednesday, 2/20/2008 4:22:14 PM
 User: Kim Johnston

Process Sheet

Customer	CU-DAR001 Dart Helicopters Services			Drawing Name	R/H STEP ASSY
Job Number	37533			Part Number	D3724042
Estimate Number	13170			Drawing Number	D3724 U/R
P.O. Number				Project Number	N/A
This issue	2/20/2008	S.O. No.	:	Drawing Revision	U/R
Prsh Rev.	NC			Material	:
First Issue	/ /	Type	LARGE FAB ASSY	Due Date	3/10/2008
Previous Run	37532			Qty:	1
Written By				Um:	Each
Checked & Approved By					
Comment	Est Rev: A new issue 08-02-07 DD verified by:				

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	D2622120C	Extrusion 1.50 Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s) Qty Part # Description Batch: 1 D2622-120C Extrusion <u>B35618</u> <u>B34694</u>
2.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1 Check Material for any Dents or Defects Comment: LARGE FABRICATION RESOURCE 1 1-Cut D3737-1 as per dwg D3737 <u>=335618</u> 2-Cut D3738-1 as per dwg D3738 <u>=B34694</u> 3-Deburr and bevel ends for welding Comment: INSPECT WORK TO CURRENT STEP 3.0 QC5 INSPECT WORK TO CURRENT STEP Comment: INSPECT WORK TO CURRENT STEP 4.0 D37331 GUSSET Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s) GUSSET batch <u>37297</u>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 2/20/2008 4:22:14 PM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: R/H STEP ASSY

Job Number: 37533

Part Number: D3724042

Job Number:



Seq. #: Machine Or Operation:

Description :

5.0 LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Weld D3738-1, D3737-1 and D3733-1 as per dwg D3724

1/08-02-25
1/08-02-25

2-Grind flush

6.0 QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

PD 08-02-25 D

7.0 QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

8.0 HAND FINISHING1

HAND FINISHING RESOURCE #1



(IX)

Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

m/s

08/02/26

9.0 QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

10.0 D2734

206 Step Endplate



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

206 Step Endplate

batch 33652e

1/08-03-14

11.0 D37281

PLATE



Comment: Qty.: 3.0000 Each(s)/Unit Total : 3.0000 Each(s)

PLATE

batch B37579

12.0 D37291

PLATE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

PLATE

batch B375800 x(1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: R/H STEP ASSY

Job Number: 37533

Part Number: D3724042

Job Number:



Seq. #:

Machine Or Operation:

Description :

13.0

D37301

ANGLE



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

ANGLE

batch

37516 x(8)

~~08-03-13~~

14.0

D37411

ANGLE



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

ANGLE

batch

37400 x(6), B 37162 x(2)

15.0

MS20470AD511

Rivet



Comment: Qty.: 12.0000 Each(s)/Unit Total : 12.0000 Each(s)

Rivet

batch

m107100 x(3)

mf

08-03-13

16.0

MS20470AD516

Rivet



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Rivet

batch

m107100 x(3)

mf

08-03-13

17.0

CR321354

Cherry Rivet



Comment: Qty.: 32.0000 Each(s)/Unit Total.: 32.0000 Each(s)

Cherry Rivet

batch m107100

08-03-13

18.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Apply Magnobond before installing rivets

A/R Magnobond 6398 Batch: m104677

mf

08-03-13

2-Rivet D3741-1 and D3730-1 to brackets before installing on step as per dwg D3724

08-03-14

3-Transfer holes from D3730-1 and D3741-1 into step as per dwg D3724

08-03-14

4-Deburr

08-03-14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
08-03-13	V8	Took 9 rivets ms20470ADS16 (instead of ms20470BAS11) and cut down to fit angle 3730-1	MF.	08-03-13	3	65 18-03-13	(08-03-13

Part No: _____ P/N #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
08-03-13	V8	- rivet was too short for bracket, rivet expanded hole in angle bracket while taking it out.	MF.	- scrap & destroy. Qty x 8 Angle and replace 3730-1. B # 37576	MF. 08-03-13	(08-03-13	/	(08-03-13
		- Ø of holes are now too big. RC Human error short and parts were too fast.	MF.					

NOTE: Date & initial all entries

Date: Wednesday, 2/20/2008 4:22:14 PM
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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: R/H STEP ASSY

Job Number: 37533

Part Number: D3724042

Job Number:



Seq. #:

Machine Or Operation:

Description :

5- realodine holes

19.0 LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Apply magnabond as per dwg D3724

A/R Magnabond 6398 Batch: M10L695

FL 08-03-14 1

2-Rivet brackets in place on step as per dwg D3724

FL 08-03-14 1

3-Weld both end cap as per Dwg D3724

FL 08-03-14 1

4-Grind end cap welds flush

Inspect for foreign object per QSI 024

FL 08-03-14 1

20.0 QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

PD 0803-15 ①

21.0 QC5

INSPECT WORK TO CURRENT STEP



ENGINEERING
APPROVAL

Comment: INSPECT WORK TO CURRENT STEP

1808.03.15

180803/15

22.0 HAND FINISHING1

HAND FINISHING RESOURCE #1



(X)

Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

M. J. / am 08/03/15

23.0 POWDER COATING

POWDER COATING



M 107005

①

Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

FL 08-03-17

24.0 QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

FL 08/03/17 ①

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 2/20/2008 4:22:14 PM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: R/H STEP ASSY

Job Number: 37533

Part Number: D3724042

Job Number:



Seq. #: Machine Or Operation:

Description :

25.0 HAND FINISHING1

HAND FINISHING RESOURCE #1



m107385



FZ 08/03/17 ①

Comment: Wing Walk as per Dwg D3043 and QSI 005-4.4

26.0 QC5

INSPECT WORK TO CURRENT STEP



1003 17 ①



Comment: INSPECT WORK TO CURRENT STEP

27.0 PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location:

PPP.37519

DR 08/03/17

④

28.0 QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



u 08-03-17

POSITIVE RECALL

EFFECTIVE 02/21/17 ④

RELEASED 02/21/17 DR 08/03/17

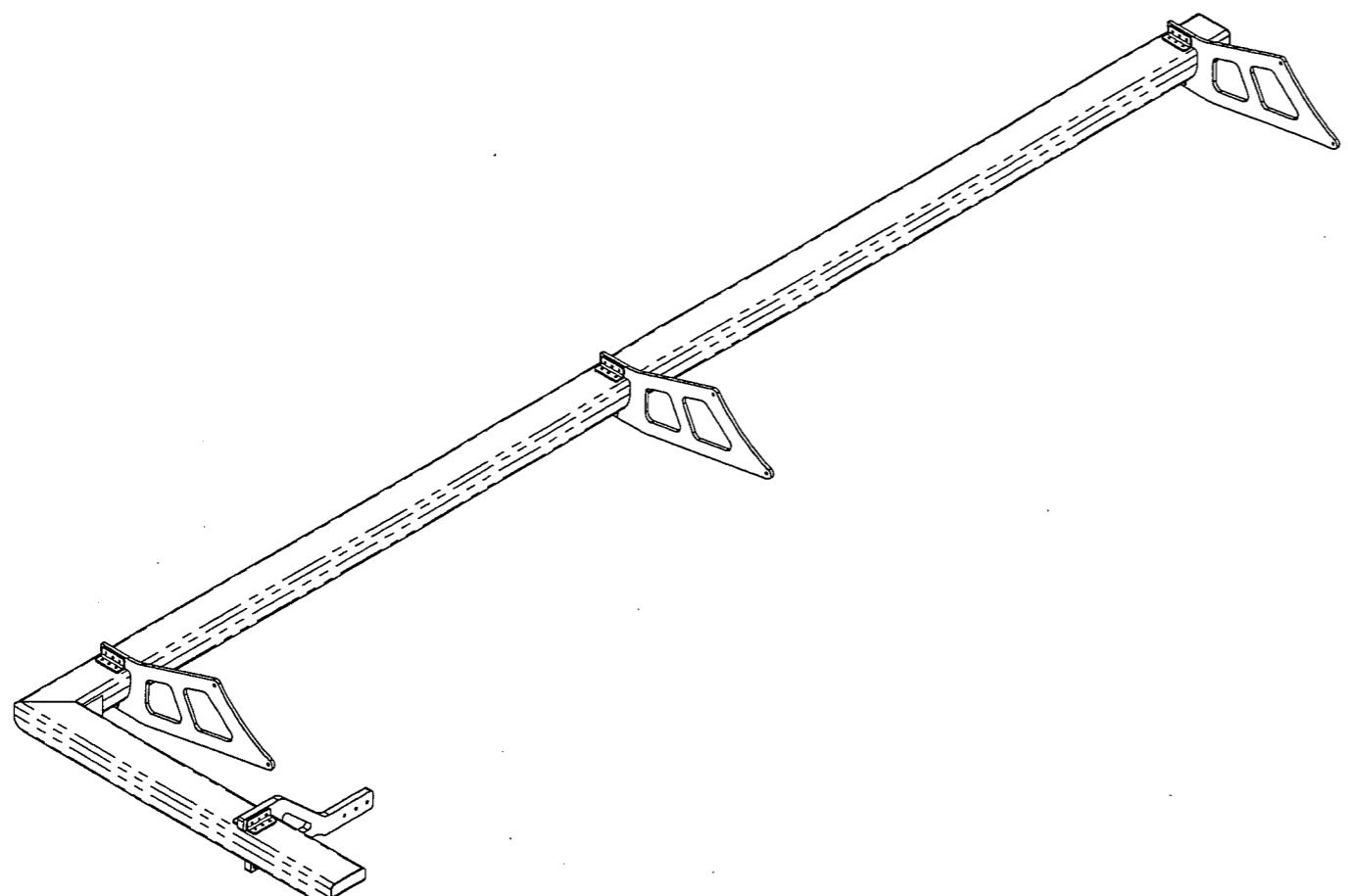
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

QTY	P/N	DESCRIPTION
-042		
X	D3724-042	STEP ASSY
2	D2734-1	END PLATE
3	D3728-1	STEP BRACKET
1	D3729-1	STEP BRACKET
8	D3730-1	ANGLE
1	D3733-1	GUSSET
1	D3737-1	STEP
1	D3738-1	STEP
8	D3741-1	ANGLE
32	CR3216-5-4	RIVET
3	MS20470AD5-11	RIVET
1	MS20470AD5-16	RIVET



D3724-042 STEP ASSY

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WORK ORDER
NO. 37533

PRELIMINARY ISSUE

LE 08.02.15

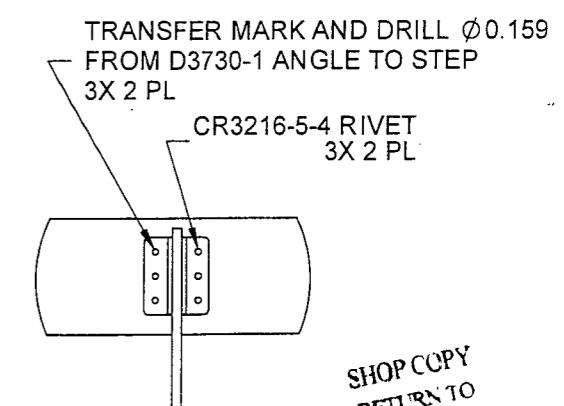
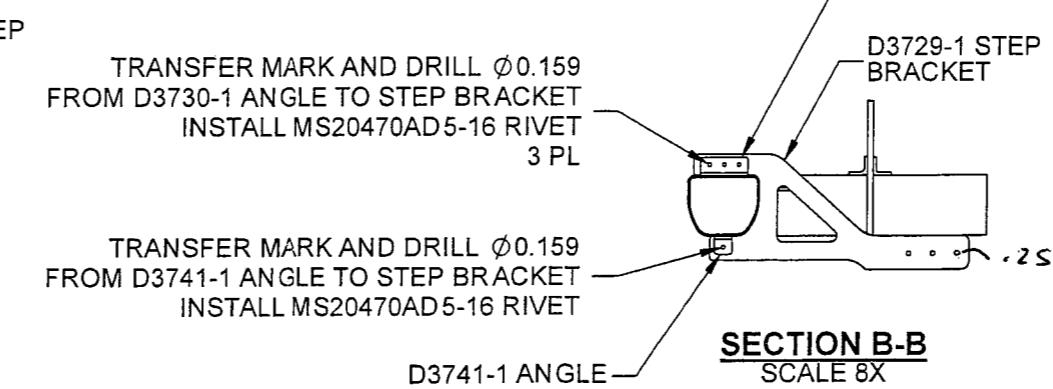
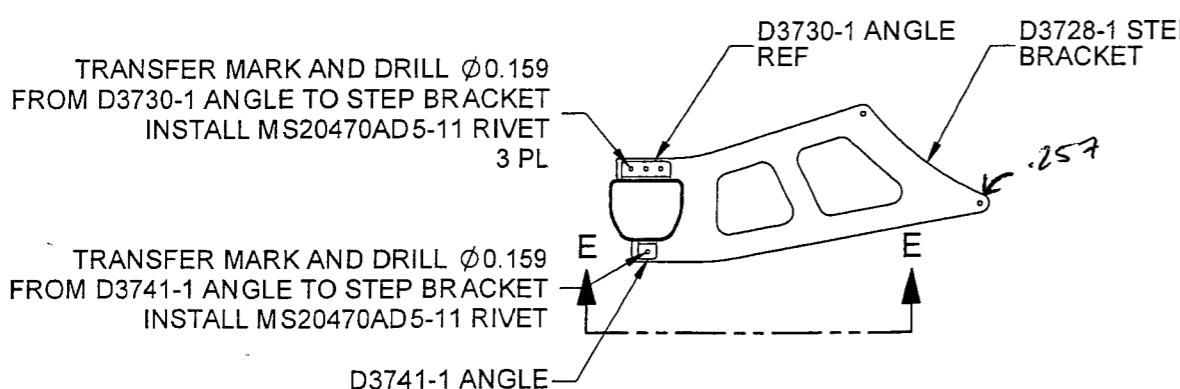
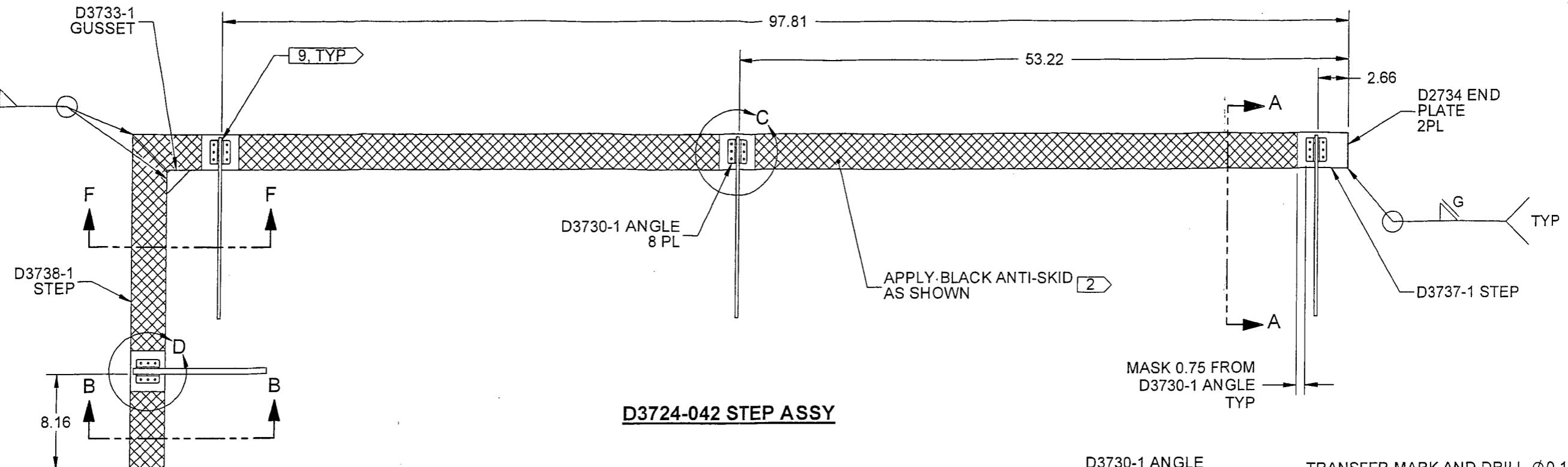
NOTES:

- 1) MATERIAL: NONE
- 2) FINISH: CHEMICAL CONVERSION COAT WELDMENT PER DART QSI 005 4.1 PRIOR TO ASSEMBLY
POWDER COAT ENTIRE ASSEMBLY WHITE GLOSS (4.3.5.1) PER DART QSI 005 4.3
APPLY BLACK ANTI-SKID PER DART QSI 005 4.4 WHERE INDICATED
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 13.91 lbs
- 8) WELDING: PER DART QSI 004
- 9) APPLY MAGNOBOND 6398 BETWEEN MATING SURFACES WHERE INDICATED

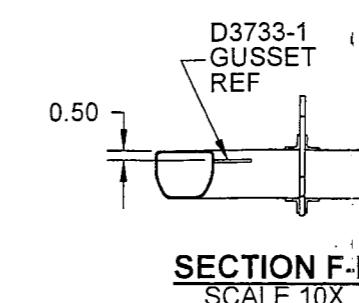
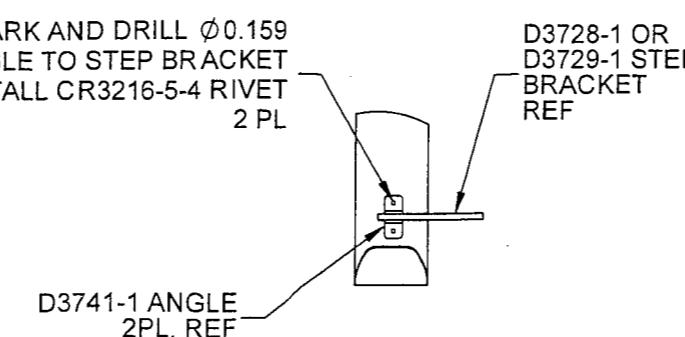
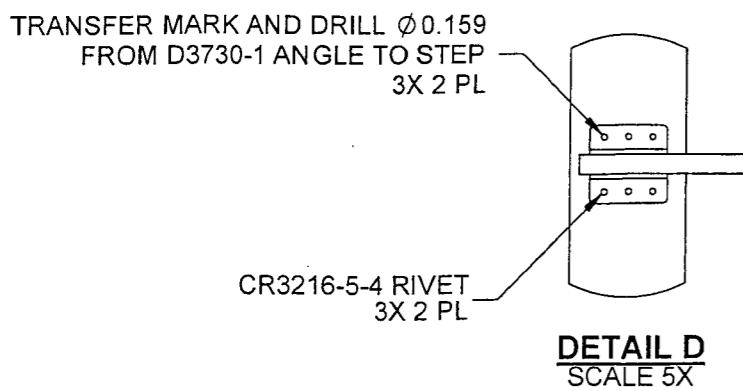
A	NEW ISSUE	AJS	08.02.04
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	LE	DRAWING NO.	
MFG. APPR.		REV. A	
APPROVED		D3724	SHEET 1 OF 2
DE APPR.	LE	TITLE	SCALE
DATE	08.02.04	STEP ASSY	NTS

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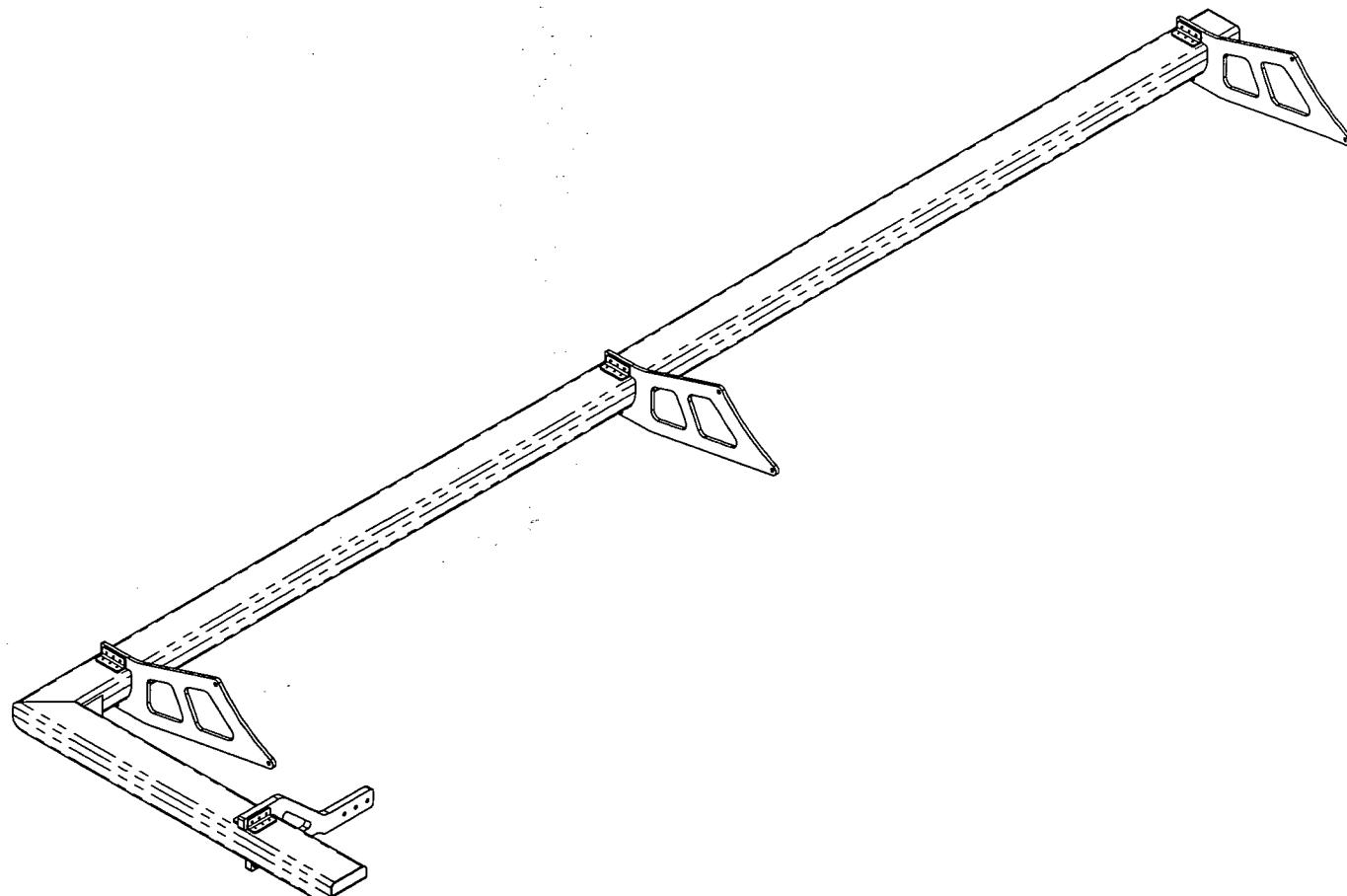


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WITHOUT NOT'CE
WORK ORDER
NO. 375333



DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN	M	
CHECKED	U3	
MFG. APPR.		
APPROVED		
DE APPR.	H	
DATE	08.02.04	REV. A
DRAWING NO.	D3724	SHEET 2 OF 2
TITLE	STEP ASSY	SCALE
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PRELIMINARY ISSUE
LE 08.02.15

D3724-042 STEP ASSY (SHOWN)D3724-041 STEP ASSY (OPPOSITE) △NOTES:

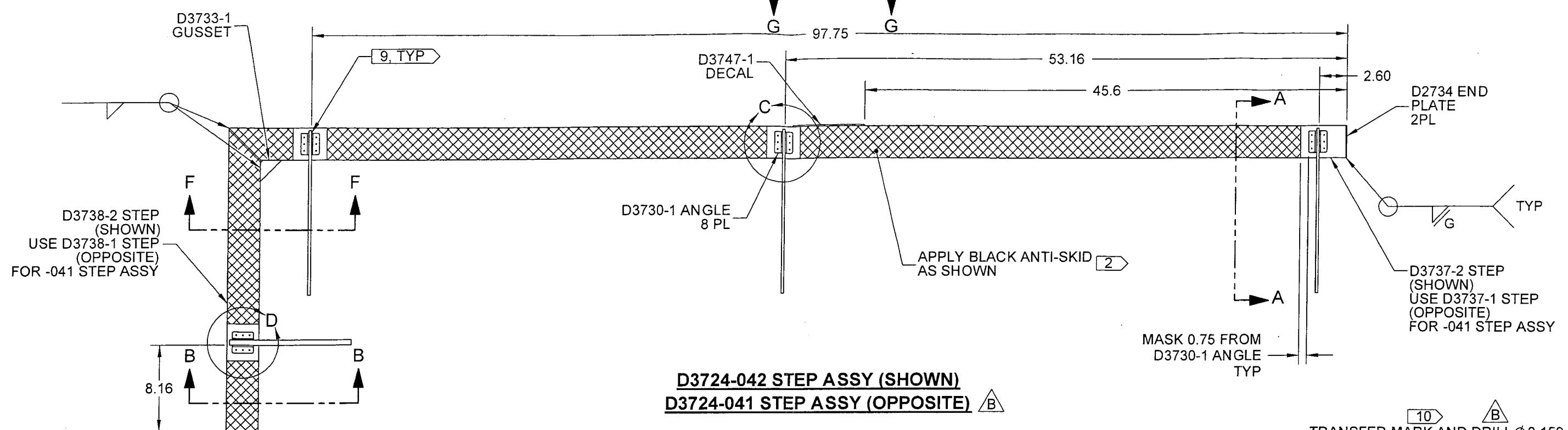
- 1) MATERIAL: NONE
- 2) FINISH: CHEMICAL CONVERSION COAT WELDMENT PER DART QSI 005 4.1 PRIOR TO ASSEMBLY
POWDER COAT ENTIRE ASSEMBLY WHITE GLOSS (4.3.5.1) PER DART QSI 005 4.3
APPLY BLACK ANTI-SKID PER DART QSI 005 4.4 WHERE INDICATED
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 13.89 lbs
- 8) WELDING: PER DART QSI 004
- 9) APPLY MAGNOBOND 6398 BETWEEN MATING SURFACES WHERE INDICATED
- 10) TOUCH UP CHEMICAL CONVERSION COAT ON ALL PARTS TRANSFER-DRILLED. (REF QSI 005 4.1)

QTY -041	QTY -042	P/N	DESCRIPTION
X		D3724-041	STEP ASSEMBLY
	X	D3724-042	STEP ASSEMBLY
2	2	D2734-1	END PLATE
8	8	D3730-1	ANGLE
1	1	D3733-1	GUSSET
1		D3737-1	STEP
	1	D3737-2	STEP
1		D3738-1	STEP
	1	D3738-2	STEP
1	1	D3747-1	DECAL
32	32	CR3216-5-4	RIVET
12	12	MS20470AD5-11	RIVET
4	4	MS20470AD5-16	RIVET
8	8	D3741-1	ANGLE
3	3	D3728-1	STEP BRACKET
1	1	D3729-1	STEP BRACKET

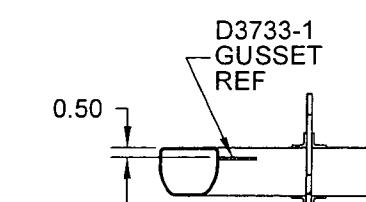
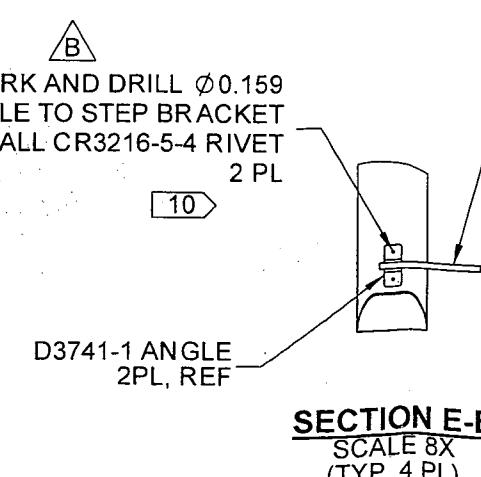
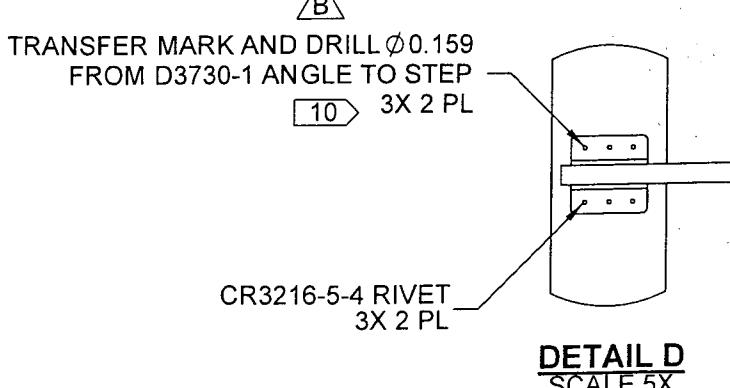
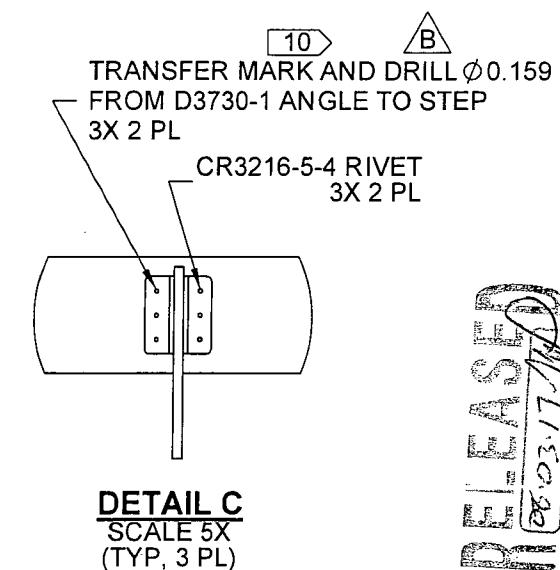
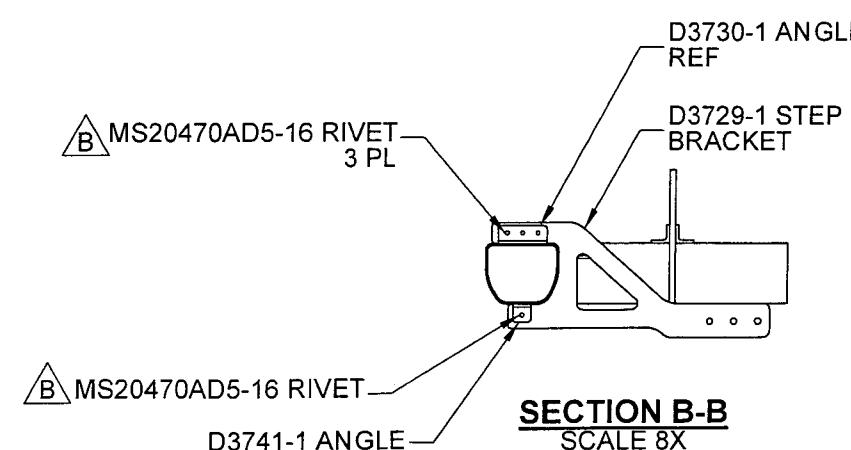
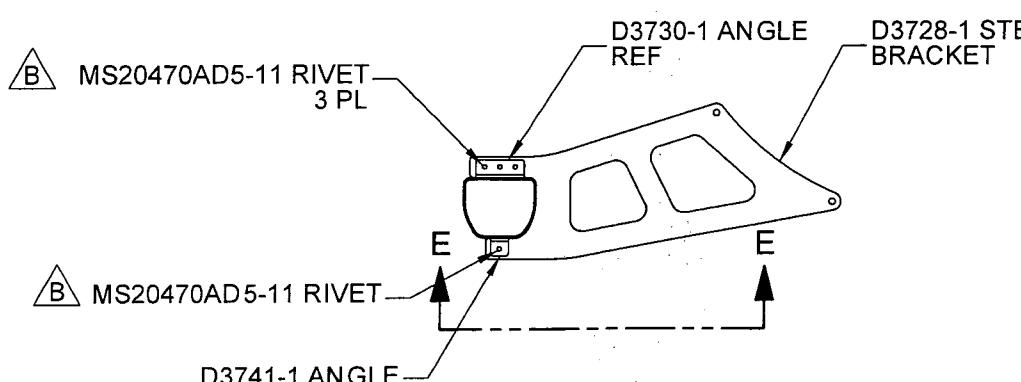
RELEASED
08-03-17 JWP

B	ADD -041 ASSEMBLY. ADD D3747-1 DECAL TO P/L. SHEET 2 TRANSFER MARKING INSTRUCTIONS FOR INSTALLING D3730-1 & D3741-1 ON D3728-1 & D3729-1 DELETED. SHEET 2 DETAIL C, D & SECTION E-E Ø0.159 WAS Ø0.098. ZONE D4 53.16 DIM WAS 53.22, 2.60 DIM WAS 2.66. ADD SECTION G-G.			AJS	08.02.26
A	NEW ISSUE			AJS	08.02.04
REV.	DESCRIPTION			BY	DATE
DESIGN	AJS	DART AEROSPACE LTD			
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA			
CHECKED	LE	DRAWING NO.			
MFG. APPR.	W	REV. B			
APPROVED	M	D3724			
DE APPR.	S	TITLE			
DATE	08.02.26	STEP ASSY			NTS
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D3724-042 STEP ASSY (SHOWN)
D3724-041 STEP ASSY (OPPOSITE)



DESIGN	AJS	DART AEROSPACE LTD
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA
CHECKED	U	REV. B
MFG. APPR.	AA	DRAWING NO.
APPROVED	MM	D3724
DE APPR.	CH	TITLE
DATE	08.02.26	STEP ASSY

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RELEASED
08.02.17